Reports for Committee Members / University Campuses

Name of Institution: North Carolina School of Science and Mathematics

Date: August 26, 2009

Contact: Ed McBride, Vice Chancellor for Finance and Operations

1. Total Amount of Bond Dollars Allocated to this Campus?

\$5,215,545

2. Please list the projects currently underway, the estimated cost, and the status of each of these projects?

| | Construction Contract Cost | <u>Status</u> | | | | | |
|----------------------|----------------------------|---|--|--|--|--|--|
| Royall Center | | | | | | | |
| Selective Demolition | \$38,176 | 100% Completed | | | | | |
| Renovation | \$2,465,050 | 100% Completed. Beneficial Occupancy on February 14, 2003. Six weeks behind schedule. Includes non- bond funds. Building Dedication on May 2, 2003. | | | | | |
| Bryan Center | | | | | | | |
| Phase IIA | \$277,219 | 100% Completed. Beneficial Occupancy on August 13, 2002. On schedule. | | | | | |
| Phase IIB | \$2,436,081 | 100% Completed. Building occupancy approved on July 27, 2004 (six-month delay). Building Dedication on October 29, 2004. The claims between the contractor and NCSSM have been dropped by both sides. | | | | | |
| Phase IIC | \$52,545 | 84% Completed. Expected completion is September 2009. | | | | | |

3. Are the projects adequately timed to reflect cash-flow requirements? If not, explain.

Yes.

4. List the projects that are substantially above or below budget and explain why. ("Substantial" is defined as plus or minus 10%.)

Bryan Center Phase IIB 5.2% below budget. See Item 13 Best Practices.

Royall Center 14.1% below budget. See Item 13 Best

Practices.

5. Overall, are the projects underway on this campus ahead, behind, or on schedule?

The Bryan Center Phase IIB was completed on July 27, 2004, which is a six-month delay. The project has been delayed for six months since the wood flooring in the Bryan Lobby was condemned by the designer under Articles 26 and 28. The wood flooring had to be replaced by another contractor. The contractor has been cited by the designer for other faulty work, and the pay applications have been delayed and reduced. Although some of the delay is due to unsuitable soils and weather delay, the contractor was slow in completing the work.

The Bryan Center Phase IIA was completed on schedule.

The Royall Center was completed six weeks late on February 14, 2003 due to the impact of several ice/snow storms that disrupted electricity service, holiday period, and completing final items on the project. In addition, the contractors were not able to complete the testing, inspections, and certification of the fire alarm system until the week of January 20, 2003, which delayed the rest of the project completion.

6. What type of construction methods are being used (Single Prime, Multi-Prime, Construction Manager, Construction Manager at Risk)? Which ones have proven to be most effective and efficient?

The Royall Center and Bryan Phase IIA were Multi Prime projects. The Bryan Phase IIB was a Single Prime project. The methods used were appropriate for the size and complexity of NCSSM's projects.

7. If this campus is using CM at Risk for any of its projects, please describe your overall experiences using this method.

N/A

8. Are the expenditures of the proceeds from the bonds issued under this act in compliance with the provisions of this act?

Yes.

9. Are there projects that have had a change in scope from its original intent? If any of these projects require General Assembly approval, please list these projects and the change.

No.

10. List projects currently underway that require additional funding, other than bond dollars.

None.

11. What are the sources for these funds? Are all of these funds on hand? If not, please explain why.

N/A

12. What is the current HUB participation rate at this campus (please break down for Women, African-American, and Other)? Please list and explain efforts to reach HUB goals.

| Royall Center | Construction Contract Cost | Black Amount | % | Women Amount | % | Other Amount | % | Total HUB Amount | % |
|---|--------------------------------------|--------------------------|---------------|----------------------------------|------------------|-----------------|------------|-----------------------------------|------------------------|
| Selective Demolition Renovation | \$38,176 \$2,465,050 | \$8,796 | 0% | \$131,252 | 5% | \$22,513 | 1% | \$162,561 | 6.6% |
| Bryan Center Phase IIA Phase IIB Phase IIC | \$277,219 \$2,436,081 \$52,545 | \$36,354 \$13,848 | 1% 26% | \$11,080 \$237,289 \$5,400 | 4% 10% 10% | \$90,323 | 4% | \$11,080 \$363,966 \$19,248 | 4.0% 14.9% 36.6% |

NCSSM has developed and implemented a plan to increase the HUB participation for the Bryan Center Phase IIB project. NCSSM held a Vendor Open House on May 21, 2002 that had over 100 participants. The Vendor Open House provided a several-hour program that provided an overview of NCSSM, Bryan Center Phase IIB project, tours of the campus, and a networking session. The networking session provided participants of large, medium, and small firms the opportunity to interact and talk about building teams for the project. The list of Vendor Open House attendees was provided to the designer, each firm that requested a set of bid drawings, Pre-Bid Meeting participants on September 26, 2002 and any firm that expressed an interest in bidding on the project.

Other actions to encourage increased HUB participation included advertising the projects in The Challenger Newspaper, informing the designer that NCSSM would pay the \$200 plan deposit for any firm that requested a waiver, having drawings available in the Plant Facilities Building's conference room for potential bidders to review, and having these sets of drawings available for HUB firms to check out at no cost to the contractor.

13. Please describe any innovative practices being used to complete the Bond Program.

Developed and implemented a value engineering process that analyzed the components of the construction projects, including potential bid alternates. The resulting construction bids were \$1.2 million or 26% below the designer's construction cost estimate of \$4.7 million for both projects, and \$.5 million or 9% under the budget amount. The financial impact is even greater when the 10% designer's fee and 5% construction contingency costs are added to the construction cost savings of both projects.

An evening open house was held on May 21, 2002 to introduce the contracting community to the upcoming construction repair opportunities at NCSSM, and provide a networking session between contractors and minority subcontractors. See narrative for Item 12.

14. What are the major challenges facing this University in completing the bond projects.

NCSSM is a small institution with only a few staff handling the critical functions of the UNC bond construction program. Turnover of the Director of Plant Facilities position in 2002 and 2003 forced the work to be spread between the Vice Chancellor for Finance and Operations, and Acting Director of Plant Facilities.

Another challenge for NCSSM is how to schedule and prioritize the construction work to minimize the impact on NCSSM's residential high school students. The heavy construction work must be done during the summer months. Since NCSSM already uses almost all of its available space, there is almost no swing space available. NCSSM also must consider increased security measures since NCSSM's students are minors from throughout North Carolina.

15. If this challenge was listed previously, what has been done since the last meeting/survey to remedy the situation?

NCSSM has continued to absorb the challenges and focus on completing the bond projects as quickly as possible. The Director of Plant Facilities joined NCSSM in August 2003, and concentrated on quickly learning the Plant Facilities operation at NCSSM and the construction program process. NCSSM implemented an Electronic Access Control project in 2003 that provides enhanced security for NCSSM's students and staff. An electronic access card is required to open external doors at NCSSM.

16. Please list projects that are scheduled to start within the next quarter.

None.

17. Additional Comments/Concerns.

Both of NCSSM's Bond Program projects have been completed. The Royall Center and Bryan Center projects will enhance the educational services provided to NCSSM's students.